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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/691,811	10/19/2000	Stanley W. Olson	BERG-2550/C2719	5391

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John P Donohue Jr Esq
Woodcock Washburn Kurtz
Mackiewicz & Norris LLP
One Liberty Place - 46th Floor
Philadelphia, PA 19103

EXAMINER

ABRAMS, NEIL

ART UNIT PAPER NUMBER

2839

DATE MAILED: 08/13/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/691811

Applicant(s)

Examiner

N. Abrams

Group Art Unit

2839

— The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address —

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

☒ Responsive to communication(s) filed on 6-30-03 (l/m 6-26)

☒ This action is **FINAL**.

- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

☒ Claim(s) 15-19, 42-46 is/are pending in the application.

Of the above claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 15-19, 42-46 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claim(s) _____ are subject to restriction or election requirement

Application Papers

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119 (a)-(d).

☐ All ☐ Some* ☐ None of the:

☐ Certified copies of the priority documents have been received.

☐ Certified copies of the priority documents have been received in Application No. _____

☐ Copies of the certified copies of the priority documents have been received

in this national stage application from the International Bureau (PCT Rule 17.2(a))

*Certified copies not received: _____

Attachment(s)

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☐ Notice of Reference(s) Cited, PTO-892

☐ Notice of Informal Patent Application, PTO-152

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Other _____

Office Action Summary

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Spec page 11, line 21 is unclear.

Claims 42-46 and 15-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gaudenzi in view of LoVasco, Dozier and Japan 2-28990.

See last office action. For article claims 42-46 “single reflow process” limitations defines no structural feature and the “hold down manufactures ... securing of said contact” does not define a distinct limitation. The securement order would not effect structural features of final product in a clear manner. The same product would result with post 58 secured first followed by securement of solder balls 56. Observation would not indicate that the hold down was formed to become secured subsequent to contact securement.

For the method claims, the assertion that the reference hold down 58 could be secured subsequent to the contacts 56 being secured is maintained since in claim 15 the limitation is not tied in with the intended new result. Claim 15 does not clearly require the contact to center during the reflow process or even to be able to do so. It would read on a process where centering is allowed only during placement of the contacts on the pads and not during reflow.

Claim 15 could be amended to include; --the relationship of hold down, post and reflow process being such as to enable the contact to freely move to center on and become secured to the pad during the reflow process while solder used for securing the post remains substantially as liquid--.

Claim 15 with such addition together with other present limitations would overcome Gaudenzi which does not teach or suggest such alignment steps during reflow.

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Applicant's arguments filed with the amendment have been fully considered but they are not persuasive.

See above discussion. Argument on page 4, lines 9-11 is unclear. Since Gaudenzi posts 58 limit movement of substrate 54 on the circuit board on what basis does applicant assert that solder balls would center on wrong pads or bridge two pads?


THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication should be directed to N. Abrams at telephone number 308-1729.

Abrams/ek

08/08/03


NEIL ABRAMS
EXAMINER
ART UNIT 322